## FIREWOOD SURVEY METHODS AND RESULTS

Out of concern that pest insects could be moved in firewood the Plant Protection and Weed Control Program of the Kansas Dept. of Agriculture initiated a firewood survey in November of 2006. Firewood was purchased from various retailers from across the state and an effort was made to find firewood brought in from other states. It was found that firewood came from as far as California and New York. Some of the firewood had been certified by USDA as to meeting their pest free standards. Some of the wood was labeled as dried but it was not clear by what drying process.

Once the samples had been gathered they were kept outdoors in a protected area. Once all of the wood (12 samples) had been collected it was brought to Topeka for processing. An effort was made to determine the type of wood in the bundles. Oak, elm, hackberry, ash and pine were determined as present. The following rearing method was used:

Large heavy duty shipping boxes were purchased from UPS. The bottoms of the boxes were sealed with shipping tape---do not use duct tape. The inside edges of the boxes were also sealed to keep beetles from crawling inside the corrugations. Once the box had been formed the wood was removed from the shrink wrap and placed in the box, at this time the original wrapper was placed in the box along with our survey form. The box was then sealed around all of the edges. In order to detect insect emergence a hole was cut in the side of the box and a jar was inserted. It was believed that the beetles would be attracted to the light. As it turned out no beetles came to the jars and for subsequent samples this step was abandoned. The boxes were placed in a rearing room that was maintained at 75 degrees and eight hours of light. The boxes were opened the third week of February and probably could have been opened several weeks sooner. Out of the twelve samples four contained adult beetles-----longhorned beetles and bark beetles. Surprisingly no buprestids emerged. All adult beetles were dead except for one very active redheaded ash borer. After checking for insects the wood was placed back in the boxes and the boxes resealed to check for later emergence. One concern was that damp wood might mold but this was not a problem. It is possible that the wood might have gotten too dry preventing some beetles from emerging, but it is not certain if this happened.

THE RESULTS: The following species were reared and identified from firewood. Numbers reared are next to the species name.

2 Arhopalus foveicollis----pine 12 Phymatodes varius-----oak? 16 Neoclytus acuminatus-----ash 10 Megacyllene caryae----ash 2 Monarthrum fasciatum----oak 2 Monarthrum mali----oak

In addition 3 longhorned beetle larvae were found in the bottom of one box. Five *Ips grandicollis* were reared from a pine sample not related to the firewood survey.

27 February 2007